Making Commitments

Setting big goals drives big innovation

REI turns its distribution center Net Zero. You can too.

The challenge

REI had taken a firm approach to sustainability over the years, but by 2012, they had their eye on new opportunities. Corporate sustainability was evolving, and companies were beginning to work smarter. One-off energy efficiency projects were quickly being replaced by more high-level, strategic approaches to energy management. Looking for guidance, they called on EDF Climate Corps to help lead the way in this energy "revolution".

REI's distribution center, located in the Arizona desert.

Setting a plan, and acting on it

In 2012, EDF Climate Corps fellow Kristen Demeter found herself asking one overarching question: could buildings be so efficient that they don't need to purchase energy and yet still be financially sustainable? In search of the answer, Kristen explored the technological and financial feasibility around turning a distribution center into a net-zero energy building (NZEB)—a building that produces as much energy as it uses over a year by maximizing energy efficiency and incorporating onsite renewable energy.

> *REI's facility is intended to be one of the world's most sustainable distribution centers. The comapny is encouraging further innovation, by making design information of this facility available to the public,*

Kristen prepared a mix of briefing materials: a database of specific industry design guidance, recommendations on the newest, most efficient technologies and best practices for net zero energy, as well as strategies for future planning and design of an NZEB. She built preliminary energy and financial models capable of estimating the NPV of a NZEB. The numbers said it all: energy could be saved and electricity costs reduced.

The future of product distribution

Flash forward to 2016, REI has brought this project to life. They recently launched a Net Zero Energy

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distribution center, receiving LEED Platinum certification, the highest level in the U.S. Green Building Councils rating system. The facility houses a 2.2 MW onsite solar system, capable of meeting the building's annual power needs. Also included, is a non-evaporative cooling system that saves millions of gallons of water each year.

REI's 2.2 MW onsite solar system is capable of meeting all of the distribution center's annual power needs.

And, the story doesn't stop here. REI intends to have a lasting impact, not just on the environment, but on the sphere of corporate sustainability by encouraging others to follow their lead. The design information will be shared publicly to encourage other corporations to drive sustainability and efficiency in dynamic new ways.

From lighting and HVAC, to conveyor systems, equipment and office areas, distribution centers are a critical piece of harvesting untapped energy savings. REI is a great example of a business prepared to take on the challenge of optimizing energy intensity, and we are excited to see what other companies follow suit.

About REI

REI, is a privately held retail cooperative that sells outdoor recreational equipment, sporting goods and clothing with over 140 store locations. EDF fellows have helped REI identify numerous energy efficiency measures since 2010.

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EDF Climate Corps

Accelerate your clean energy projects.

Achieve your climate goals.

EDF Climate Corps is a premier summer fellowship program that embeds trained, custom-matched graduate students inside leading organizations to accelerate clean energy projects and climate goals.

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